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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,551	11/30/2001	Christopher D.S. Donham	NVIDP064/P000286	2643

28875 7590 10/15/2004

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EXAMINER

TRAN, TAM D

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 10/15/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,551

Applicant(s)

DONHAM ET AL.

Examiner

Tam D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al.

(US2002/0101427 A1).

2. In regard to claim 1, 24-27, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline (graphic data stream), paragraph 5, 6 page 1, comprising: (a) sending an instruction request to memory utilizing a texture module (texture manager) in a graphics pipeline (using computer implemented instructions located in memory corresponding to definition of IEEE dictionary for instruction which is binary word sending serially into device, texture will be loaded into AGP memory corresponding to sending to memory); see paragraph 25 page 2, paragraph 36 page 3; and (b) receiving instructions from the memory in response to the instruction request utilizing the texture module (texture manager) in the graphics pipeline (using computer implemented instructions located in memory, the process begin by receiving a request to store a texture in texture memory). See Fig.3, paragraph 25 page 2, paragraph 31, 32 page 3.

3. In regard to claim 2, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, further comprising sending a texture request to memory utilizing the texture module in the graphics pipeline. See Fig.3, paragraph 32 page 3.
4. In regard to claim 3, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, and further comprising receiving texture information from the memory in response to the texture request utilizing the texture module in the graphics pipeline. See paragraph 32 page 3.
5. In regard to claim 4, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the memory includes a frame buffer. See paragraph 28 page 3.
6. In regard to claim 5, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the memory includes direct random access memory (DRAM). See paragraph 46 page 4.
7. In regard to claim 6, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the instructions are adapted for controlling a texture environment module coupled to the texture module. See paragraph 25 page 2.
8. In regard to claim 7, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the instructions control the manner in which the texture environment module processes the texture information. See paragraph 26 page 2.

9. In regard to claim 8, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, and further comprising receiving initial instructions from a rasterizer module coupled to the texture module. See paragraph 32 page 3.

10. In regard to claim 9, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the initial instructions control at least the sending of the instruction request by the texture module. See paragraph 32 page 3.

11. In regard to claim 10, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, and further comprising temporarily storing the instructions and the texture information in cache. See paragraph 19 page 2.

12. In regard to claim 11, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the cache is resident on the texture module. See paragraph 19 page 2.

13. In regard to claim 12, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein each piece of texture information and each of the instructions are of a similar size in the memory. See paragraph 46 page 4.

14. In regard to claim 13, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, and further comprising

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controlling the texture module utilizing a shader module coupled thereto. See paragraph 30 page 3.

15. In regard to claim 14, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the shader module controls the sending of the instruction request and the texture request by the texture module. See paragraph 30 page 3.

16. In regard to claim 15, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the shader module processes a plurality of pixels with the texture information based on the instructions. See paragraph 32 page 3.

17. In regard to claim 16, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the shader module is capable of reusing the texture information in order to request further texture information from the memory. See paragraph 32 page 3.

18. In regard to claim 17, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, and further comprising ceasing the processing upon the receipt of a terminate instruction. See paragraph 32 page 3.

19. In regard to claim 18, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein a complete instruction set is received in response to the instruction request. See paragraph 32 page 3.

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20. In regard to claims 19, 20, 21, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein a partial instruction set is received in response to the instruction request. See paragraph 32 page 3.

21. In regard to claims 22, 23, Nguyen teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the texture module is adapted for operating in a plurality of different modes. See paragraph 30 page 30.

22. In regard to claims 28, 29, Nguyen teaches a method for retrieving instructions from memory, comprising: (a) receiving a plurality of preliminary instructions from a rasterizer module utilizing a shader module/ texture module (texture manager) coupled thereto; (b) sending an instruction request to memory utilizing a texture module coupled to the shader module/ texture module; see paragraph 30 page 3; (c) receiving additional instructions from the memory in response to the instruction request utilizing the texture module; (d) caching the additional instructions on the texture module; (e) sending a texture request to memory utilizing the texture module in accordance with the additional instructions; (f) receiving texture information from the memory in response to the texture request utilizing the texture module; (g) caching the texture information on the texture module; see paragraph 32 page 3; (h) processing a plurality of pixels (screen resolutions differ from the resolution of texture map corresponding to plurality of pixels with texture information) with the texture information utilizing the shader module in accordance with the additional instructions; (i) repeating (b) - (h) in accordance with the additional instructions; and (j) outputting the processed pixels upon receipt of additional instructions that include a terminate instruction. See paragraph 32 page 3.

Response to Arguments

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23. Applicant's arguments filed on 07/29/2004, have been fully considered but they are not persuasive.

Applicant argues that the prior art does not teach “ sending an instruction request to memory utilizing a texture module and receiving instructions from memory in response to instruction request”. However, examiner respectfully disagrees with the argument because on Fig.3, paragraph 25, 31, 32, 36, Nguyen teaches using computer implemented instructions located in memory corresponding to definition of IEEE dictionary for instruction which is binary word sending serially into device, texture will be loaded into AGP memory corresponding to sending instructions to memory, and the process begin by receiving a request to store a texture in texture memory. For these reasons, the rejections are maintained.

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Conclusion

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The examiner can normally be reached on MON-FRI from 8:30 – 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella** can be reached on **703-308-6829**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tam Tran

TT
Examiner

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MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600